

CLAIMS

We claim:

1. A method comprising:
placing a substrate with a ferroelectric polymer layer formed thereon in a chamber; and
sputtering a metal layer at a reduced flux on the ferroelectric polymer layer.
2. The method of Claim 1, wherein sputtering comprises sputtering in the presence of a collimator.
3. The method of Claim 2, wherein sputtering may be performed at a pressure less than approximately 10 milliTorr.
4. The method of Claim 3, wherein sputtering may be performed at a pressure equal to or less than approximately 2.5 milliTorr.
5. The method of Claim 1, wherein sputtering comprises:
forming a metal layer of at least one of TiN, TaN, TiNSi, and TaNSi.
6. The method of Claim 1, wherein sputtering comprises:
sputtering with an ion gun.
7. A method comprising:
placing a substrate with a ferroelectric polymer layer formed thereon in a chamber; and
forming an intermetallic layer between a metal layer and the ferroelectric polymer layer.

8. The method of Claim 7, wherein forming comprises:
sputtering with an ion gun.
9. The method of Claim 7, wherein forming comprises:
forming a layer of at least one of TiN, TaN, TiNSi, and TaNSi.
10. The method of Claim 7, further comprising:
amorphizing the intermetallic layer.
11. The method of Claim 10, wherein amorphizing
comprises:
implanting ions within the intermetallic layer.
12. The method of Claim 11, wherein implanting
comprises:
implanting at least one of Si ions, Ge ions, and any of
the inert gas ions in the intermetallic layer.
13. The method of Claim 10, wherein amorphizing
comprises:
forming the intermetallic layer with a technique that
renders the intermetallic layer amorphous.
14. The method of Claim 13, wherein forming comprises:
forming the intermetallic layer with a chemical vapor
deposition process.
15. An apparatus comprising:
an integrated circuit comprising
a first metal layer of at least one of TiN, TaN,
TiNSi, and TaNSi, and
a layer of ferroelectric polymer material coupled
to the first metal layer.

16. The apparatus of Claim 15, further comprising:
a second metal layer coupled to the layer of
ferroelectric polymer material.

17. The apparatus of Claim 16, wherein the second
metal layer comprises:

at least one of TiN, TaN, TiNSi, and TaNSi.

18. The apparatus of Claim 15, wherein the first metal
layer is substantially amorphous.

19. The apparatus of Claim 16, wherein the second
metal layer is substantially amorphous.

20. A system comprising:

flash memory comprising

an integrated circuit comprising

a first metal layer of at least one of TiN, TaN,
TiNSi, and TaNSi, and

a layer of ferroelectric polymer material coupled
to the first metal layer.

21. The system of Claim 20, further comprising:

a second metal layer coupled to the layer of
ferroelectric polymer material.

22. The system of Claim 21, wherein the second metal
layer comprises:

at least one of TiN, TaN, TiNSi, and TaNSi.

23. The system of Claim 20, wherein the first metal
layer is substantially amorphous.

24. The system of Claim 21, wherein the second metal
layer is substantially amorphous.